Form	504

# DEPARTMENT OF COMMERCE U. S. COAST AND GEODETIC SURVEY

State: Georgia

# DESCRIPTIVE REPORT.

Hyd. Sheet No. 4099

LOCALITY:

Doboy Sound, Ga.

approaches to Doboy

Sound , Ga.

CHIEF OF PARTY:

L. U. Potter

TELEGRAPH ADDRESS: EXPRESS OFFICE: DEPARTMENT OF COMMERCE U. S. COAST AND GEODETIC SURVEY Cilmore And dear Stigg. Owing & The long distance & snail Beroise Hour letter was delayed in being auswend In argards to the draguesed in Dobay Sound it mas 650 feet of mire not melins. Which may be a mistake on Patters statement. 600 feet effective drag instead of 600 meeters. James Cauly E.E. Ohier Box 36 midland end,

POST-OFFICE ADDRESS:

POST-OFFICE ADDRESS:

C. & G. Survey Str. Onward, Savannah, Ga.

TELEGRAPH ADDRESS:

do.

EXPRESS OFFICE:

de.

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT TO ACCOMPANY HYDROGRAPHIC SHEET No. 4099

- 1. This sheet, on a scale of 1:20000, covers the approaches to Doboy Sound from a little inside the entrance out to the thirty foot curve and all shoals and flats on either side of the channel as far north as Latitude 31-23-30 and as far south as Latitude 31-19. This work was done between Oct. 13 and Dec. 24, 1919, under orders dated Aug. 1, 1919. The operations were hampered throughout the season by rough and foggy weather. Considerable trouble was experienced in executing the hydrography due to strong and irregular currents.
- 2. Survey Methods, Usual methods of launch and ship hydrography were used except for one half day in search for a charted 6 feet spot SW by S of Can Buoy No. 5.
- of the work at the mouth of the small creek leading to Sapelo Light House. Five bench marks were established in connection with this station. In accordance with orders, tides were read for a period of 50 consecutive hours, and for an additional period of 16 hours on a temperary staff in the vicinity of the bar. An approximate comparison of these readings with those at Sapelo Light House showed little difference, and the tides at Sapelo Light House were therefore used for the reduction of the entire work. Tidal observations on the bar were recorded in the current book.
- 4. The staff used on the bar consisted of a vertical timber weighted on the bettem by pig iron lashed firmly to it to held it down, and held vertical by four lines leading to anchors. The staff remained in a vertical and rigid position throughout the observations.
- 5. Bars and Channels,— The present buoyed channel across the bar is still the main channel. The least depth in it was about 11 feet on the outer bar, and 10 feet on the inner bar. A six feet spet found on the previous survey 600 yards SW by S of buoy Np. 5, was searched for by lines spaced very closely across it, and run in three directions. A drag 600 meters long, set to an effective depth of 11 1/2 feet was also passed over the spot. No indication of a shoal was found in this vicinity, the least round depth being about 13 feet.

A second unmarked channel across the bar, leading east- nottheastward from buoy No. 5, has a depth of about 9 1/2 feet, with less water close to it.

The channel leading into Doboy Sound close along the North side, has a depth of about 8 feet, unmarked, but is extensively used by local boats drawing up to 6 feet.

letter attacked - At I

#### DESCRIPTIVE REPORT TO ACCOMPANY

#### HYDROGRAPHIC SHEET No.---

- 6. Channel Buoys, The buoys in this channel are not correctly placed to mark the best water as found by the survey.
- 7. Changes Found, Few important changes in the location and depths on the shoals were found, the most important being the disproving of the 6 ft. sounding described above. This will enable the channel to be straightened and its running considerably simplified. About 1 foot more water was found across the bar than was found on the previous survey.
- 8. The 29 ft. spot on position 35-G, and the 30 ft. spot near 58-G, near the eastern limit of the work, were not properly developed. From Dec. 17 to Dec. 24, on account of unfavorable weather, no opportunity to develop these sheals occurred, although the vessel was standing by during this time for the purpose of doing the work. The work was closed and the vessel left for Savannah on the afternoon of Dec. 24, as, in my opinion, the importance of these shoals did not justify further delay.
- 9. Currents, Current observations were made for 50 consecutive hours and for an additional period of 16 hours, at a station near the bar, indicated on the smooth sheet. These observations were made simultaneously with tidal observations mentioned above. Currents were also observed simultaneously, at a station in the middle of the channel just inside the entrance, as indicated on the smooth sheet. The tidal observations were recorded in the current book for that station.
- 10. Prominent Objects, There are no new prominent objects not already charted. Club House, a prominent object chatted, has been undermaned and has fallen to the ground and will in time fall to pieces and disappear.
- 11. Coast Pilot, Water may be had from an artesian well at Doboy Island, procurable with small boats and also at Sapelo Light House procurable with boats drawing 3 feet or less. Good anchorage may be had in 18 feet of water on range with Old and New Sapelo Light Houses and about 600 meters from shere. This anchorage is exposed to easterly winds and a better anchorage may be had in North River sheltered by Doboy Island. Towboats are obtainable only from Brunswick. The only business across the bar is an occasional barge, loaded with lumber. With the exception noted, the description of Doboy Island in Coast Pilot, Section D, is correct

L. A. Potter, H. & G. Engineer, Chief of Party. POST-OFFICE ADDRESS: C. & G. Survey Str. Onward, Savannah, Ga.

TELEGRAPH ADDRESS: \*

de.

EXPRESS OFFICE:

de.

#### DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

STATISTICS SHEET No.

Date : Let-: Vel-: Pesi- : Sound- : Miles Vessel 1919 : ter : ume : tiens : ings \* Statute Oct. 20 q 1. 58 235 7.5 Navy Launch. 21 42 161 . 6.0 : 22 ~ : 182 1 952 27.0 23 d 162 : 170 : 1020 26.5 24 2.1 . 92 \* \473\_a 14.5 27 2 62 378 -9.8 28 : 245 : 195 : 1560 33.3 29 3 148 : 1036 27.5 - 62 <sub>~</sub> 496 10.8 384 : 173 : 1344 28.5 4 30 - 30 0.3 Dory 1 43 344 : on 7.8 Navy Launch 4 114 : n 570 : 19.5 4. 1 34 : : 271 -7.5 12 4&5 : 152 : 1520 35.8 12 8 134 : -698 32.8 Steamer Onward 13 B 8 808 190 37.0 13 5 165 : 1320 27.6 Navy Launch 24 D : 546 : ~67 : 528 15.0 Ħ : : t 25 6 148 : : 1037 30.0 26 W 6 140 : 1077 30.5 : C 8 Dec. 20 - 65 1.5 Str. Onward.  $\boldsymbol{v}$ 7 27 108 2.5 Navy Launch 8 - 25 1.5 : Str. Onward U 7 18 126 4.2 : Navy Launch : × 10 -71 1 1.5 6 8 E . 17 75 3.1 Str. Onward 17 7 90 725 17.1 Navy Launch 18 60 7 483 -9-5 24 62 399 12.2 9 46 9 215 .9.8 Str. 9nward : 24 9 10 Dory Launch, Wire Drag Werk. : G 80 352 17.0 Str. Onward

Total....

2848 : 18502

526.1

AND REFER TO NO.

41-EMK

## DEPARTMENT OF COMMERCE

### U. S. COAST AND GEODETIC SURVEY

WASHINGTON

June 4, 1920.



Division of Hydrography and Topography:

Division of Charts:

Tidal reductions are approved in 9 volumes of sounding records for

HYDROGRAPHIC SHEET 4099

Doboy Sound Approach, Georgia. L. A. Potter in 1919.

Plane of reference is Mean low water, reading

3.2 ft. on tide staff at Sapelo Lighthouse, Ga.

Condition of records, satisfactory.

Getude

Chief, Section of Tides and Currents.

Forwarded:

Chief, Div. of Hyd'y and Top'y

AND REFER TO NO. 4-MEM.

#### DEPARTMENT OF COMMERCE

#### U. S. COAST AND GEODETIC SURVEY

#### WASHINGTON

#### SECTION OF FIELD RECORDS.

Report on Hydrographic Sheet 4099.

Surveyed in 1919.

Chief of Party: L. A. Potter.

Surveyed by party of Str. Onward.

Protracted by Field Party.

Soundings plotted by Field Party.

Verified and inked by H. E. MacEwen and E. K. Ellis.

- 1. The records conform to the requirements of the General Instructions, except that no information is given as to the locations of beginnings and endings of sounding lines.
- 2. The plan and character of development fulfill the requirements of the General Instructions.
- 3. The plan and extent of the development satisfy the specific instructions.
- 4. The sounding line crossings are, in general, adequate.
- 5. The information was sufficient to enable the depth curves to be completely drawn, except at the mouth of Back River.
- 6. The field plotting was completed to the extent prescribed in General Instructions.
- 7. The office draftsman did not have to do over any part of drafting done by the field party.
- 8. The hydrography from overlapping sheets was not shown to avoid confusion.
- 9. No further surveying is required in the area covered by this sheet.
- 10. The position numbers were not inked as frequently as called for by General Instructions. They were placed so close to the positions that they were covered up by the soundings.
- 11. The character and scope of the surveying and field drafting are excellent.
- 12. Reviewed by E. P. Ellis on Dec. 15, 1920.
- 13. Two copies of this report to be sent to Hydrography and Topography Divisions

Section of Field Records. Shut hr. 4099 Lurwyd in Report on Hydrography Chief of Party - L. a. Patter Surveyed by - Fuld Party Sounding Flatted by. Fuld Party. Lapography inhed by - Freld Party. Protracted by - Field Party Verified and liked by - Hornse Even The records conform & ich requirement of the general instructions. Work clearly done. Only defect - ile omission of notes marking Change y ships course. In some cases the boats head by compass was properly noted. 2. Ilu plan and character y development fulfils ih regument. 3. Ground is sufficiently well dwelafied satisfied untirely requirement set forch in specific instructions 4. Sounding crossing are adequate 5. Usual defet curus can be completely drawn Close developement of som areas cause some difficulty - not appreciable.

6. Fully hlatting was can pleted to proper istent. In ourseons 7. not nices any Di do our any part of fuld work (drafting) further any 9. Rimarko In most case ich day and position symbols and mumbers are placed so near the position of the sounding as to be totally or hartielly obliterated when, which. Field Party did not alway daugnate in th sumding records it changes in it course of sounding luns. 10. Rating - Character and Scope - Excellent, - Field drafting Excellent Rumarhs: - Reductions for Tide caused alight changes in platting of soundings are done by ih full party.

Hemaceum

Red nun # 4A Red nun #6 Oct 22 1919 Black Can #5 \_ Oct 23 Black Can #3 A -" "#3*p* — -n "#3 — Black Can #5 -Oct 24 -Black Can #3 nov. 4 Black Can #1 \_ Red Olun -Nov. 12 11 (Sea Pury) Dec 9 Red nun#6 .\_ no date between Dec 18 + Dec 24

Date of determination of buoys -

#### DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

# HYDROGRAPHIC TITLE SHEET

The finished Hydrographic Sheet is to be accompanied by the following title sheet, filled in as completely as possible, when the sheet is forwarded to the Office.

U. S. Coast and Geodetic Survey.

Register No. 4099 Surveyed by Ship work by L.A. Potter, Launch work by F. E. Okeson, small amount by W. F. Malnate. Date of survey . Oct. 13 to Dec. 24, 1919. . . . . . . . . Protracted by .  $\mathbf{w}_{\bullet}$ .  $\mathbf{F}_{\bullet}$   $\mathbf{M}_{\bullet}$ . Soundings in pencil by  $\mathbf{w}_{\bullet}$ .  $\mathbf{F}_{\bullet}$   $\mathbf{M}_{\bullet}$ . Inked by . . . . . . . . Verified by . . . . . . . . . . . Records accompanying sheet (check those forwarded): Des. report, ...... Tide books, ...... Marigrams, .... Boat sheets, 

Remarks: Tides on staff near bar recorded in current book.

Tides at Sapelo Light House ased for reduction of soundings.